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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/500,132 | 02/08/2000 | Kiyoshi Iseki | 11197/1 | 2161 |

26646 7590 02/24/2003

KENYON & KENYON
ONE BROADWAY
NEW YORK, NY 10004

EXAMINER

SIMONE, CATHERINE A

ART UNIT

PAPER NUMBER

1772

DATE MAILED: 02/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/500,132

Applicant(s)

ISEKI ET AL.

Examiner

Catherine Simone

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 December 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 5-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Specification

1. The amendment filed December 11, 2002 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: The recitations “formed on said plastic film along both a transverse direction and a longitudinal direction” (claim 1) and “in both a longitudinal direction and a transverse direction” (claim 2) are deemed new matter.

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. **Claims 1-4** are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The recitations “formed on said plastic film along both a transverse direction and a longitudinal direction” (claim 1) and “in both a longitudinal direction and a transverse direction” (claim 2) are deemed new matter. The specification, as originally filed, does not provide support for the invention as is now claimed.

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4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. **Claims 1-4** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The recitations “further wherein said inorganic oxide layer is formed by controlling an evaporation amount related to an evaporation condition, while continuously monitoring the film thickness of said inorganic oxide layer” and “wherein the ratio of the maximum *film* thickness to the minimum *film* thickness of said inorganic oxide layer” in claim 1 are deemed vague and indefinite. Clarification is requested.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. **Claim 1** is rejected under 35 U.S.C. 102(b) as being anticipated by Misiano et al. (5,462,779).

Misiano et al. discloses a functional roll film comprising a transparent plastic film having gas barrier properties (Fig. 2, #20), and having an inorganic oxide layer on at least one surface (Fig. 2, #21), wherein the plastic film is formed into a roll (see col. 4, line 9) and further wherein the inorganic oxide layer is formed by controlling an evaporation amount related to an

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evaporation condition, while continuously monitoring the film thickness of the inorganic oxide layer; and the ratio of the maximum film thickness to the minimum film thickness of the inorganic oxide layer formed on the plastic film along both a transverse direction and a longitudinal direction is inherently 1.5 or less (Fig. 2, #21; also see col. 4, lines 26-28).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. **Claim 2** is rejected under 35 U.S.C. 103(a) as being unpatentable over Misiano et al. (5,462,779).

Misiano et al. discloses a plastic film with an inorganic oxide layer comprising a composite oxide having at least two components (see col. 2, lines 10-13) except for the difference between a maximum wt% of and a minimum wt% of one component of the composite oxide is within 20 wt%. However, Misiano et al. does teach a maximum wt% and a minimum wt% of one component (see Fig. 3; also see col. 3, lines 57-64). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a difference between a maximum wt% of and a minimum wt% of one component of the composite oxide within 20 wt%, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Boesch and Slaney*, 205 USPQ 215 (CCPA 1980).

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10. **Claims 3 and 4** are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Misiano et al. (5,462,779).

Although Misiano et al. does not explicitly teach the limitation (i.e. static electricity of a plastic film having an inorganic layer ...) of **claim 3**, it is reasonable to presume that said limitations are inherent to the invention. Support for said presumption is found in the use of similar materials (i.e. plastic film having gas barrier properties and at least one surface with an inorganic oxide layer which comprises a composite oxide matter in which at least two or more kinds of oxide matters are composite etc...). The burden is upon the Applicant to prove otherwise. *In re Fitzgerald*, 205 USPQ 594. Note *In re Best*, 195 USPQ 433, footnote 4 (CCPA 1977) as to the providing of this rejection under 35 USC 103 in addition to the rejection made above under 35 USC 102.

Regarding **claims 3 and 4**, Misiano et al. discloses a plastic film with an inorganic oxide layer having a variation in thickness (see col. 4, lines 30-32) except for the variation in thickness being in the range of $\pm 20\%$, and the static electricity of the plastic film being in the range from -10 kV to +10 kV. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have static electricity in the range from -10 kV to +10 kV and to have a variation in thickness in a range of $\pm 20\%$, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Boesch and Slaney*, 205 USPQ 215 (CCPA 1980).

Response to Arguments

11. Applicant's arguments filed December 11, 2002 have been fully considered but they are not persuasive. Applicant states that "In Misiano et al., however, there is neither disclosure or a suggestion of the need to control the thickness variation of the $\text{Al}_2\text{O}_3/\text{SiO}_2$ mixed layer in either the transverse direction or longitudinal directions. Nor is there recognition that the inorganic oxide layer should have good flexibility and gas barrier properties and that the layer can be stably secured to the plastic film when a thickness variation width is controlled to less than a prescribed value. Applicants submit that the objective of Misiano et al., is not to attain a homogeneous mixed layer of $\text{Al}_2\text{O}_3/\text{SiO}_2$, but to form a mixed layer with a composition graded in a film thickness direction, which is altogether different from the present invention, which forms a homogeneous mixed layer of $\text{Al}_2\text{O}_3/\text{SiO}_2$. Therefore, Applicants submit that a film formed using the method of Misiano et al. would not have excellent gas barrier properties, nor be resistant to cracking, as is the present invention."

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "the need to control the thickness variation of the $\text{Al}_2\text{O}_3/\text{SiO}_2$ mixed layer in either the transverse direction or longitudinal directions", "the inorganic oxide layer should have good flexibility and gas barrier properties and that the layer can be stably secured to the plastic film when a thickness variation width is controlled to less than a prescribed value" and "a homogeneous mixed layer of $\text{Al}_2\text{O}_3/\text{SiO}_2$ ") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant also states "in Misiano et al., there is no recognition or measures taken in order to assure thickness uniformity in a transverse film direction" and "Misiano et al. does not disclose a concrete method to assure uniform film thickness and there are no control mechanisms, as in the present invention, to reduce variation in film thickness." However, it is to be pointed out that Misinao et al. discloses the functional roll film as recited in the claims. Again, the Applicant is arguing features which are not recited in the claims. Furthermore, the Applicant is arguing the method of making and controlling this roll film. However, it is to be pointed out that the method of forming a product is given little or no patentable weight and is not germane to the issue of patentability of the product itself. Overall, the film taught by Misiano et al. has the same end result as the film in the present invention regardless the method of making.

Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Catherine Simone whose telephone number is (703) 605-4297.

The examiner can normally be reached on 9:30-6:00.

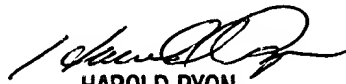
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on (703) 308-4251. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



Catherine Simone
Examiner
Art Unit 1772

February 13, 2003


HAROLD PYON
SUPERVISORY PATENT EXAMINER

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2/20/03